ILLINOIS ENVIRONMENTAL PROTECTION AGENCY MEMORANDUM

DATE: May 11, 1986

TO: Division File

FROM: Jeannine Balsamo

SUBJECT: 0316000033 - Cook County - Chicago/Paxton II

An inspection was conducted at the Paxton II Landfill on April 1, 1986 to determine their degree of compliance with Subpart F Groundwater Monitoring Requirements. Due to the weather, site verification was conducted on April 28, 1986 with Gulf Coast Labs who were conducting the monthly sampling of the wells at that time. Present at the inspection were Dan Smith and Jean Seller of Paxton. Jean Seller and personnel from Gulf Coast Laboratory were present during site verification.

Paxton submitted their Part A application on November 18, 1980 notifying that they had landfilled hazardous waste prior to November 18, 1980, and for the future destruction and treatment of hazardous waste by a distillation column and incinerator. The company later withdrew their application stating that the incinerator was never built nor was any hazardous waste accepted at the site after November 18, 1980. Withdrawal was denied based on several manifests for loads of hazardous waste from Conoco that were accepted at the site. The Agency never referred the site to USEPA but provided the necessary information to them concerning the matter. USEPA required the facility to either submit a Part B or a closure/post-closure plan. (In addition, they filed a complaint and set a fine.) Paxton submitted a closure plan which was found to be inadequate as it allowed for only ten years of post-closure monitoring. USEPA has issued a third set of comments concerning closure of the site. Dan Smith believes both Paxton and USEPA will agree to a plan which allows for 30 years of post-closure monitoring with no required leachate collection. Since the facility contends that they are not a hazardous waste facility, they have not complied with any of the RCRA requirements.

Paxton II is built on an old landfill (7 acres out of 42 acres are virgin material) and is bordered by Paxton I (non-hazardous) to the east, Land & Lakes Landfill to the south, and Interlake Landfill (closed) to the north. Since the facility contends they are not regulated under RCRA, they have not conducted any hydrological studies to determine groundwater flow direction or aquifer characteristics nor have they installed an adequate monitoring system. A study conducted by Walter H. Flood, Inc. in 1976 is used to characterize the geological conditions of the site. Information from a 1983 Weston study, conducted for a permit application to develop Paxton III as an above

extension of Paxton I, is also utilized. Groundwater flow, as stated in the Flood report, was expected to be westerly while the Weston report indicates irratic flow across the site. An upgradient well has not been determined for the site. The facility presently utilizes ten monitoring wells to monitor Paxton II for their State permit. The depths, locations, and construction of these wells are all inadequate for RCRA compliance. Construction details for many of the wells have not been submitted and Dan Smith has stated that all records have been subpoenaed and cannot be copied.

A clay barrier has been built around the entire perimeter of Paxton II to a depth of 40 feet in some areas which acts to retain leachate within its walls. Sampling data has shown levels far above standards for all tested parameters in all shallow wells. Wells G12D and G12S are located within the walls of the leachate barrier. G12S has shown extremely high levels of inorganics and organics. A summary of the organic results from a August 21, 1985 IEPA sampling is included. Due to filling, G12D and G12S are now at ground surface and leachate has been seen bubbling up between the PVC well and the metal standpipe. It is believed that these wells are acting as a source of discharge for the leachate. Well G15S, located on the other side of the clay wall, also exhibits extremely high levels of organics. Wells were concentrated in this area along the northern site boundary in an attempt to define any waste plume that may be migrating off-site. Dan Smith explained that he is trying to get approval for a drainage system for the leachate to relieve the pressure within the clay barrier. Also of concern is the fact that G12D and G12S may be acting as a pathway for leachate to enter the aquifer systems. Paxton has requested removal of the wells but has been denied.

The following provides more detail to the Subpart F inspection checklist. Checklist items are referrenced to the specific question's number:

Appendix A-1

2. The facility monitors the groundwater for a State permit contending that they are not subject to RCRA regulations. The monitoring program is inadequate as far as number of wells, well locations, well depths, and well construction.

3. The facility does not have a designated upgradient well. A 1976 report conducted by Walter H. Flood, Inc. stated that groundwater flow was expected to be westerly, which would make Paxton I directly upgradient from Paxton II. Recent groundwater elevations, though, indicate flow may be irratic with apparent

designation of an upgradient well. The facility will be asked to address the issues concerning well discrepancies.

JB/kes

cc: Northern Region
Compliance Monitoring Section
Jeannine Balsamo